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Card 3/3

NIKOLIN, A.V., glav. revizor po bezopasnosti sudokhodstva, red.;  
 PIROZHKOV, N.I., kapitan-nastavnik, red.; POLETAYEV,  
 L.A., kapitan-nastavnik, red.; KOZIN, N.A., kapitan,  
 red.; KUZNETSOV, B.Yu., kapitan, red.; TARASOV, A.G.,  
 kapitan, red.; VYKHODTSEV, P.K., red.; PERMYAKOV, V.V.,  
 red.; SIDOROV, F.G., red.; SOLOV'YEV, V.B., red.;  
 SHIRINKIN, A.D., red.; SHCHEPETOV, I.A., red.; SMIRNOV,  
 F.A., red.; KOSTIN, V.F., red.; SAVOSTIN, N.D., red.;  
 FILYASOV, K.A., red.; IVANOV, A.I., red.; LOBANOV, Ye.M.,  
 red.izd-va; REMNEVA, T.T., tekhn. red.

[Rules for the navigation on inland shipping routes of the  
 R.S.F.S.R.] Pravila plavaniia po vnutrennim sudokhodnym  
 putiam RSFSR. Vvedeny v deistvie s 15 marta 1963. g. pri-  
 kazom ministra rechnogo flota No.33 ot 28 fevralia 1963. g.  
 Moskva, Izd-vo "Rechnoi transport," 1963. 98 p.  
 (MIRA 16:6)

1. Russia (1917- R.S.F.S.R.) Ministerstvo rechnogo flota.  
 (Inland navigation--Laws and regulations)

TARASOV, A.I.

Seminar on the exchange of experience in manufacturing water  
emulsion paints. Lakokras.mat.i ikh prim. no.1:92 '62. (MIRA 15:4)

(Paint)

GOROKHOV, A.M., putevoy rabochiy; BESEDOVSKIY, D.A.; TARASOV, A.I.; KRIVOBOK, G.K.;  
MOISEYENKO, A.D., inzh.-mekhanik; YUR'YAKS, P.I. [Jurjaks, P.];  
IBRAGIMOV, A.A.; SAFRONOV, V.S.; SHAROV, N.N.

Letters to the editor. Put' i put.khoz. 7 no.4:40-42 '63.  
(MIRA 16:3)

1. Stantsiya Talovaya, Yugo-Vostochnoy dorogi (for Gorokhov).
2. Nachal'nik distantzii zashchitnykh lesenasazhdeniy, stantsiya Atkarsk, Privolzhskoy dorogi (for Besedovskiy).
3. Nachal'nik putevoy mashinnoy stantsii, stantsiya I'gov, Moskovskoy dorogi (for Tarasov).
4. Sekretar' partiynoy organizatsii stantsii Nikitovka, Donetskoy dorogi (for Krivobok).
5. Stantsiya Nikitovka, Donetskoy dorogi (for Moiseyenko).
6. Brigadir puti, stantsiya Platone, Pribaltiyskoy dorogi (for Yur'yaks).
7. Zamestitel' nachal'nika distantzii, Sal'yany, Zakavkazskoy dorogi (for Ibragimov).
8. Starshiy normirovshchik, stantsiya Rtishchevo, Privolzhskoy dorogi (for Safronov).
9. Sekretar' partiynoy organizatsii, stantsiya Rtishchevo, Privolzhskoy dorogi (for Sharov).

(Railroads—Maintenance and repair)



*S. J. C. T.*

*Machinery and Appliances*  
*21*

Heat exchanger for use in vulcanizing rubber.  
A. I. TARASOV (U.S.S.R.), 63500, Chem. Abs., 1047,  
61, 1873). RI(15)1

*1947*

TARASOV, A. I.

137-1957-12-23222

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 52 (USSR)

AUTHORS: Ivanov, O. S., Tarasov, A. I.

TITLE: A Device for the Maintenance of Required Temperatures in Programmed Heating and Cooling Operations (Prisposobleniye priborov dlya podderzhaniya zadannykh temperatur k programmnomu nagrevu i okhlazhdeniyu)

PERIODICAL: Tr. In-ta metallurgii AN SSSR, 1957, Nr 1, pp 196-198

ABSTRACT: A description of a device consisting of 0.1 mm Pt wire wound around a pulley and capable of maintaining any desired small rate of heating or cooling in the furnace by means of a contact galvanometer or potentiometer; the device slides downward with a constant velocity along a stationary contact under the influence of a load and a timing mechanism; a second contact is attached to the other end of the wire. The Pt wire serves as a conductor for a current, the magnitude of which is controlled by a resistor. The contact galvanometer maintains a constant value of the sum of the emf  $E_t$  of the thermocouple and of the voltage drop  $V_d$  in the Pt wire, which increases with the descent of the wire; thus

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137-1957-12-23222

A Device for the Maintenance of Required Temperatures (cont.)

the contact galvanometer regulates the furnace temperature in such a manner as to lower the value of  $E_t$  by an amount equal to the increase of  $V_d$ ; in application this is virtually equivalent to a linear decrease of temperature in the 1100 - 500° range.

G. G.

1. Temperature-Control
2. Galvanometers-Applications

Card 2/2



TARASOV, A. slower!

Device for removing wheel disks. Na stroi. Mosk. 2 no.12:26 D '59  
(MIRA 13:3)

1. UM-17 tresta Mosstroyemkhanizatsiya No.2.  
(Automobiles-Wheels)

**PARASOV, A. I.**  
**DETERMINATION OF THE NET CALORIFIC VALUE OF FUELS BY CALCULATION**  
 1956. *Gostoptekhnizdat*, 1956. Methods of  
 Investigating Petroleum and Petroleum Products. (Metody Issledovaniya Nefti i  
 1 Neftoproductov, 312-316; abstr. in Ref. Zh. Khim. (Ref. J. Chem.,  
 1956, (2), 59189). From a large amount of experimental data an  
 empirical formula is deduced for the determination of hydrogen content, using  
 values of calorific value found by a bomb method; the formula is given by  

$$H = 0.00085 \cdot Q_{net} + 0.0001$$
 where  $H$  is the hydrogen content of the fuel in cal/g. from a  
 bomb determination. The formula is applicable to petroleum products, whose  
 calorific value lies in the range 10,000-11,500 cal/g., and whose hydrogen  
 content is within the limits 10.85-15.00%. The formula is not applicable to  
 the calculation of hydrogen content in unsaturated hydrocarbons and benzene.

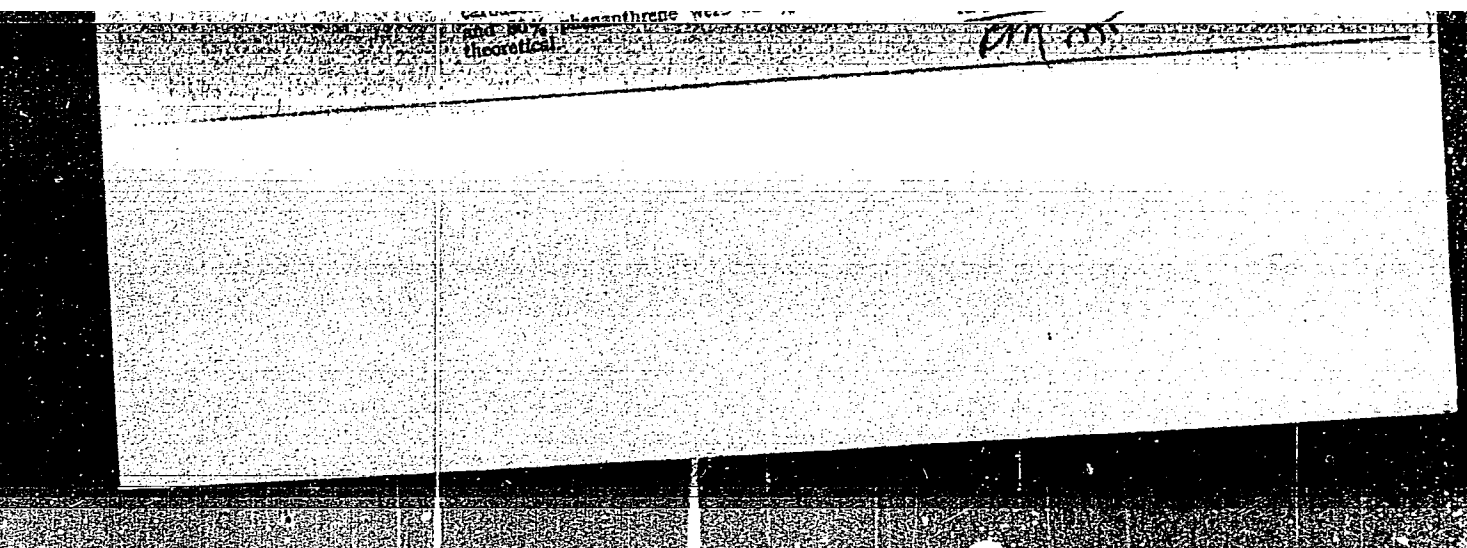


TARASHOV, A. I.

7  
Control oxidation of industrial phenanthrene by atmospheric  
oxygen. S. S. Spasnik, M. A. Mikhailova, A. V. Tokarev and A. I.  
Tarashov. Khim., 1950, 20, 447-450. A detailed descrip-  
tion of the method used. Using as

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TARASOV, A.I.

57

44E3d

2032. DETERMINATION OF SULPHUR IN OILS BY THE LAMP METHOD. Musychenko, V.P., Tarasov, A.I. and Ogareva, N.V. (Moscow: Gostoptekhizdat, 1955, Methods of Examining Petroleum and Petroleum Products, 275-281; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (12), 42244). The method was tested on lubricants, raffinates and deasphaltized residues, using 70-octane gasoline and industrial isooctane as diluent. Accuracy was tested on artificial mixtures of individual sulphur compounds. The lamp method gives more accurate results than combustion in a bomb, and takes 1/3 to 1/4 of the time. The ratio of solvent to sample is from 3 to 1 to 7 to 1.

NS

SOV/81-59-16-58565

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 419 (USSR)

AUTHORS: Muzychenko, V.P., Raunyanokaya, A. Ya., Taranov, A.I.

TITLE: The Determination of Magnesium in Mazuts

PERIODICAL: Novosti neft. tekhn. Neftepererabotka, 1958, Nr 9, pp 18-20

ABSTRACT: A method for the quantitative determination of magnesium in mazuts has been developed. For separating Mg the method of ashing the sample (5 g) in a platinum cup has been chosen; the concentration of Mg in the ashes solution is determined by the colorimetric method with the application of a dyestuff, - titanium yellow. The error of the method is  $\pm 6$  relative %.  
There are 9 references.

G. Margolina.

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TARASOV, N. I.

p. 3

PHASE I BOOK EXPLOITATION

SOV/3938

Akademiya nauk SSSR. Ural'skiy filial. Institut khimii.

Sbornik rabot laboratorii vysokomolekulyarnykh soyedineniy, No. 2 (Collected Papers of the Laboratory of High-Molecular Compounds, No. 2) Sverdlovsk, 1959. 53 p. (Series: Its: Trudy, vyp. 3) Errata slip inserted. 1,000 copies printed.

Eds.: V.G. Plyusnin, Doctor of Chemistry, and V.N. Kozlov, Doctor of Technical Sciences; Tech. Ed.: N.F. Seredkina.

PURPOSE: This collection of three articles is intended for chemists and technicians interested in the chemistry of high-molecular compounds and polymers.

COVERAGE: The first article of this collection discusses the expression of the activity factor in the Alfrey and Price equation by a constant which could be determined independently of equations

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Collected Papers of the Laboratory (Cont.)

SOV/3938

$$r_1 = \frac{Q_1}{Q_2} e^{-e_1(e_1 - e_2)}, \quad r_2 = \frac{Q_2}{Q_1} e^{-e_2(e_2 - e_1)}, \text{ where } r_1 \text{ and}$$

$r_2$  are the copolymerization constants,  $Q_1$  and  $Q_2$  are the activity factors of the monomers,  $e_1$  and  $e_2$  are the polar factors of the monomers, and  $e$  is the base of the natural logarithms. The article explores the possibility of using for this end a value characterizing the dimensions [size] of the electron cloud formed by  $\pi$ -electrons of the reacting double and short bonds conjugated with it. The second article reports on a study made of the copolymerization of polydiethylene glycol fumarate and of poly-1, 3-butylene glycol fumarate with styrol, methylmethacrylate, acrylonitrile and vinyl acetate to explain the peculiarities of the copolymerization reaction of unsaturated polyesters with vinyl monomers. The third article reports on a study of the behavior of nitrile rubbers and polyesters of various structure used as plasticizers. L.M. Gindin, A.D. Abkin, and S.S. Medvedev are mentioned. References accompany each article.

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Collected Papers of the Laboratory (Cont.)

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Bibliography of Publications of the Institut khimii Ural'skogo filial AN SSSR (Institute of Chemistry of the Ural Branch of the Academy of Sciences USSR) for the Years 1932 to 1956	43

AVAILABLE: Library of Congress

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SPASSKIY, S.S.; TOKAREV, A.V.; MIKHAYLOVA, M.A.; TARASOV, A.I.; MOLCHANOVA, T. V.;  
MAT'KOVA, M. Ye.

Copolymerization of unsaturated polyesters with vinyl monomers. Trudy  
Inst. khim. UFAN SSSR no.3:21-32 '59 (MIRA 14:3)  
(Esters) (Vinyl compounds) (Polymerization)

5(2)

SOV/32-25-7-12/50

AUTHORS:

Tarasov, A. I., Kudryavtseva, N. A., Ioganson, A. V., Lulova, N. I.

TITLE:

Automatic Analysis of Flowing Gases by Means of Chromatograph  
KhPA-1 (Avtomaticheskii analiz gazov v potoke na  
khromatografe KhPA-1)

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 803-805 (USSR)

ABSTRACT:

In collaboration with the Collective V. R. Anders, P. A. Frolovskiy, V. F. Remnev, M. S. Slobodkin and Ye. S. Bulakh of the SKB of petroleum industry, an automatic chromatograph - gas analyzer KhPA-1 was designed (Fig 1) for the purpose of controlling the composition of gas flows in technological processes of the petroleum refining industry and the petroleum chemical industry. The device provides a thermostating of the feeding analyzer (at temperatures above room temperature), and the application of a detector of the heat conductivity. The separation columns can be exchanged according to the conditions of the analysis. A new column filling was used, composed of tripolite (from Zikeyev quarry) with an addition of paraffin-naphthene oil and soda. A separation of the hydrocarbons  $C_1-C_4$  occurs after 16 - 17 minutes and that of the

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Automatic Analysis of Flowing Gases by Means of  
Chromatograph KhPA-1

SOV/32-25-7-12/50

hydrocarbons  $C_1-C_5$  after about 15 - 50 minutes in columns 4 - 6 m long and 6 mm in diameter, filled with the above mentioned substance, at temperatures between 40 - 200° and a flowing rate of the developing gas (nitrogen) of 2 - 8 l/hour. Ethane-ethylene cannot be separated. Sensitivity coefficients were determined and applied for the computation of the gas composition. The results of the analysis obtained by means of the appliance KhPA-1 were compared to those of the chromatograph Fraktovap (of the firm Carlo Erbe, Italy), (Table 1). The reproducibility of the results achieved in the analysis of industrial gases was also determined (Table 2). At present a test appliance KhPA-1 is being installed in the gas fractionating plant of the Novo-Ufimskiy neftepererabatyvayushchiy zavod (Novo-Ufimskiy Petroleum Refinery) for the automatic analysis of butane-butane fractions. The production of a test series of automatic industrial chromatographs KhPA-1 will be carried out in Moskovskiy zavod KIP (Moscow Works KIP) in 1959. There are 2 figures, 2 tables, and 2 references, 1 of which is Soviet.

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Automatic Analysis of Flowing Gases by Means of  
Chromatograph KhPA-1

SOV/32-25-7-12/50

ASSOCIATION: Vsesoyuznyy institut po pererabotke nefi i gaza i  
polucheniyu iskusstvennogo zhidkogo topliva  
(All-Union Institute for the Refining of Petroleum and Gas,  
and for the Production of Artificial Liquid Fuels)

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5(4)

AUTHORS:

TITLE:

Spasskiy, S. S., Tarasov, A.I., Tokarev, A.V. 307/76-33-2-2/45  
Copolymerization of Unsaturated Polyesters and Vinyl Monomers  
(Sopolimerizatsiya nenasyshchennykh poliefirov s vinilovymi  
monomerami). I. Determination of the Number of Double Bonds  
in Copolymers of Unsaturated Polyesters and Vinyl Monomers  
(I. Opredeleniye chisla dvoynykh svyazey v sopolimerakh ne-  
nasyshchennykh poliefirov i vinilovykh monomerov)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 2,  
pp 249 - 254 (USSR)

ABSTRACT:

Although these copolymers represent new thermally reactive  
synthetic materials the principles involved in their copoly-  
merization have not been sufficiently investigated. The  
possibilities of applying two methods, based on the additivity  
of the specific volumes and of the specific refractions,  
were investigated. The following systems were used in checking  
the methods: polydiethylene glycol fumarate - acrylonitrile;  
polydiethylene glycol fumarate (I) - styrene; (I)-methyl  
methacrylate; (I)-vinyl acetate. Laboratory workers M. A.  
Mikhaylova, T. V. Kolchanova, M. K. Mat'kova participated  
in the experiments. The copolymerization was carried out

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Copolymerization of Unsaturated Polyesters and Vinyl Monomers. I. Determination of the Number of Double Bonds in Copolymers of Unsaturated Polyesters and Vinyl Monomers SOV/76-33-2-2/45

in glass ampuls in the presence of 0.1% by weight benzoyl peroxide in a nitrogen atmosphere and at  $60 \pm 0.5^\circ\text{C}$ . The index of refraction was determined using an Abbe refractometer. The magnitude of the specific shrinking of the polyester chain was determined by proceeding upon the assumption (Ref 7) that the shrinkage of the monomers in the polymerization (contraction) is dependent upon their structures. The styrene-methyl methacrylate system was tested using the rule of the additivity of the specific volumes (Table 2). The contraction was determined from the specific volumes of the diethyl fumarate (II) and polydiethyl fumarate (III) using the equation  $P = M(\delta_F - \delta_{PF})$  ( $P$  = contraction,  $M$  = molecular weight of (II),  $\delta_F, \delta_{PF}$  = specific volumes of (II) and (III)); the value found was 16.7. The specific shrinkage for the chain of (I) was found to be 0.08971. The determination of the increments of the monomer double bond was carried out using the specific refraction (Table 4); a value of 0.0144 was found for (I). The results obtained by both

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Copolymerization of Unsaturated Polyesters and Vinyl Monomers. I. Determination of the Number of Double Bonds in Copolymers of Unsaturated Polyesters and Vinyl Monomers SOV/76-33-2-2/45

methods described above (Table 5) are in good agreement, and it may be concluded from these determinations that both methods are equally valid in determining the copolymerization constants of unsaturated polyesters and vinyl derivatives. There are 5 tables and 8 references, 5 of which are Soviet.

ASSOCIATION: Ural'skiy filial Akademii nauk SSSR, Sverdlovsk (Ural Branch of the Academy of Sciences, USSR, Sverdlovsk)

SUBMITTED: March 6, 1957

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5 (4), 15 (8)  
AUTHORS:

Spasskiy, S. S., Mikhaylova, M. A.,  
Tarasov, A. I., Molchanova, T. V.,  
Mat'kova, M. Ye.

SOV/76-33-7-1/40

TITLE:

Copolymerization of Unsaturated Polyesters With Vinyl Monomers.  
IV. Copolymerization of Polydiethylene Glycol Fumarate With  
Styrene, Acrylonitrile, Methyl Methacrylate, and Vinyl Acetate

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 7, pp 1449 - 1454  
(USSR)

ABSTRACT:

In a previous paper (Ref 1) it was found among other things that acrylonitrile during copolymerization (C) with unsaturated polyesters (PE) shows decreasing activity compared with that in (C) with diesters of fumaric acid. It was assumed that these phenomena are due to steric factors. In order to confirm this assumption, the authors investigated the (C) of polydiethylene glycol fumarate (I) with styrene (II), acrylonitrile (III), methyl methacrylate (IV), and vinyl acetate. The properties of the vinyl monomers are listed (Table 1). The (C) constants (CC) were determined according to the Mayo-Lewis equation (Ref 4). The experimental results obtained are listed (Table 2) from

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Copolymerization of Unsaturated Polyesters With Vinyl SOV/76-33-7-1/40  
Monomers. IV. Copolymerization of Polydiethylene Glycol  
Fumarate With Styrene, Acrylonitrile, Methyl Methacrylate, and Vinyl Acetate

which the (CC) as well as the reaction rate of the chain radicals of the (PE) and of the vinyl monomers were calculated (Table 3). The activity of the vinyl derivatives increases (with respect to the chain radical of the (PE)) from (II) to (V), while during the (C) of vinyl monomers an opposite phenomenon may be observed (Ref 5), i.e. (II) possesses the strongest and (V) the weakest activity. The experimental results obtained confirm the above effect of steric factors. It is assumed that the latter increases with increasing size of the radical at the double bond and with decreasing elasticity of the monomer molecule. The authors plotted diagrams of the integral composition of the systems under investigation (Figs 1 - 4); furthermore, they pointed out among other things that no azeotropic mixtures are formed by the systems (I) + (II) and (I) + (IV). The above diagrams permit determination of the conditions for preparing homogeneous copolymers. There are 4 figures, 3 tables, and 9 references, 7 of which are Soviet.

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Copolymerization of Unsaturated Polyesters With Vinyl SOV/76-33-7-1/40  
Monomers. IV. Copolymerization of Polydiethylene Glycol  
Fumarate With Styrene, Acrylonitrile, Methyl Methacrylate, and Vinyl Acetate

ASSOCIATION: Ural'skiy filial Akademii nauk SSSR Sverdlovsk (Ural Branch of  
the Academy of Sciences of the USSR, Sverdlovsk)

SUBMITTED: March 17, 1957

Card 3/3

TARASOV, Aleksey Issarionovich. Prinimali uchastiye: KUZ'MINA, A.V.;  
ZIMINA, K.I.; POLYAKOVA, A.A.; IOGANSNN, A.V.; FROLOVSKIY, P.A.;  
LULOVA, N.I.. L'VOVA, L.A., vedushchiy red.; MUKHINA, E.A.,  
tekhn.red.

[Gases obtained in petroleum refining and methods of their  
analysis] Gazy neftepererabotki i metody ikh analiza. Moskva,  
Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960.  
222 p. (MIRA 13:2)

(Petroleum--Refining) (Gases--Analysis)

TARASOV, A. I.; LULOVA, N. I.; KUDRYAVTSEVA, N. A.; ZEMSKOVA, Ye. I.

Chromatographic gas analyzer for laboratories. Izv. tekhn. no. 8:47-  
49 Ag '60. (MIRA 13:9)

(Gases—Analysis)

3/190/60/002/011/001/027  
B004/B060

11.2210 also 2209

AUTHORS: Tarasov, A. I., Takhay, V. A., Spasskiy, S. S.

TITLE: A Study of Equations for the Composition of Ternary Copolymers. I

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11, pp. 1601 - 1607

TEXT: The authors wanted to find simple and practical ways of determining an azeotropic composition of copolymers. For this purpose they analyzed the equations relating to such compositions as possess a single azeotropic point. The following relations are derived for it:  $m_1/m_3 = M_1^1/M_3^1$  and  $m_2/m_3 = M_2^1/M_3^1$ , where  $m_1, m_2, m_3$  are the percentual concentrations, and  $M_1^1, M_2^1, M_3^1$  the molar concentrations of the components. Taking into account the relative rate constants  $r_{12}, r_{21}, r_{13}, r_{31}, r_{23}$ , and  $r_{32}$ , the following system of equations is obtained for the azeotropic point:

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A Study of Equations for the Composition of Ternary Copolymers. I

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B004/B060

$$\left( \frac{M'_1}{r_{31}r_{21}} + \frac{M'_2}{r_{21}r_{32}} + \frac{M'_3}{r_{31}r_{23}} \right) \left( M'_1 + \frac{M'_2}{r_{12}} + \frac{M'_3}{r_{13}} \right) = 1 \quad (3a)$$

$$\left( \frac{M'_1}{r_{13}r_{21}} + \frac{M'_2}{r_{23}r_{12}} + \frac{M'_3}{r_{13}r_{31}} \right) \left( M'_3 + \frac{M'_1}{r_{31}} + \frac{M'_2}{r_{32}} \right) = 1$$

$$\left( \frac{M'_1}{r_{12}r_{31}} + \frac{M'_2}{r_{12}r_{32}} + \frac{M'_3}{r_{32}r_{13}} \right) \left( M'_2 + \frac{M'_1}{r_{21}} + \frac{M'_3}{r_{23}} \right) = 1 \quad (3b)$$

$$\left( \frac{M'_1}{r_{13}r_{21}} + \frac{M'_2}{r_{23}r_{12}} + \frac{M'_3}{r_{13}r_{31}} \right) \left( M'_3 + \frac{M'_1}{r_{31}} + \frac{M'_2}{r_{32}} \right) = 1$$

$$M'_1 + M'_2 + M'_3 = 1. \quad (3c)$$

One unknown quantity is suppressed by introducing  $M_1 = M'_1/M'_3$  and  $M_2 = M'_2/M'_3$ .

Moreover, in order to avoid fractions, the reciprocal values of the relative rate constants are introduced:

$$A_{12} = 1/r_{12}, A_{21} = 1/r_{21},$$

etc., and the system of equations (7) is obtained:

$AM_1^2 + 2BM_1M_2 + CM_2^2 + 2DM_1^2 + 2EM_2 + F = 0; A_1M_1^2 + 2B_1M_1M_2 + C_1M_2^2 + 2D_1M_1 + 2E_1M_2 + F_1 = 0.$  The coefficients of these equations are defined as:  $A = A_{21}A_{31}^{11};$   
 $2B = A_{21}A_{32}^{11} + A_{12}A_{31}^{12}; C = A_{12}A_{32}^{12}; 2D = A_{23}A_{31}^{11} + A_{21}A_{13}^{13};$   
 $2E = A_{12}A_{23}^{13} + A_{13}A_{32}^{12}; F = A_{13}A_{23}^{13}; A_1 = A_{21}A_{31}^{11}; 2B_1 = A_{21}A_{32}^{11};$   
 $+ A_{12}A_{31}^{12}; C_1 = A_{12}A_{32}^{12}; 2D_1 = A_{23}A_{31}^{11} + A_{21}A_{13}^{13}; 2E_1 = A_{12}A_{23}^{13} + A_{13}A_{32}^{12};$

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85410

A Study of Equations for the Composition of Ternary Copolymers. I

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B004/B060

$F = A_{13}A_{23}l_1^1$ ;  $l_1 = 1 - A_{13}$ ;  $l_2 = A_{21} - A_{23}$ ;  $l_3 = A_{31} - 1$ ;  $l_1^1 = A_{12} - A_{13}$ ;  $l_2^1 = 1 - A_{23}$ ;  $l_3^1 = A_{32} - 1$ . The authors derived the criteria under which only positive values are obtained for equations (7). It is confirmed that only one single azeotropic point can be present in the ternary system. The following systems with azeotropic composition are tabulated:

System	Copolymerization constants						Azeotropic composition in molar fractions
	$r_{12}$	$r_{21}$	$r_{13}$	$r_{31}$	$r_{23}$	$r_{32}$	
styrene with vinylidene dichloride $\uparrow$	2.0		0.3		12.2		0.529
and dimethyl fumarate		0.14		0.07		0.046	0.093
methyl methacrylate $\uparrow$	0.44		1.35		0.07		0.378
with 2,5-dichloro styrene		2.25		0.18		0.22	0.139
and acrylonitrile $\uparrow$							0.387
styrene with 2,5-dichloro styrene	0.29		0.41		0.07		0.474
and acrylonitrile		2.2		0.04		0.22	0.467
							0.153
							0.380

Card 3/4

85410

A Study of Equations for the Composition of  
Ternary Copolymers. I

S/190/60/002/011/001/027  
B004/B060

There are 1 figure, 1 table, and 6 references: 2 Soviet and 4 US.

ASSOCIATION: Institut khimii Ural'skogo filiala AN SSSR (Institute of  
Chemistry of the Ural Branch of AS USSR)

SUBMITTED: January 29, 1960

Card 4/4

5.3830

77396  
SOV/79-30-1-57/78

AUTHORS: Spasskiy, S. S., Tarasov, A. I.

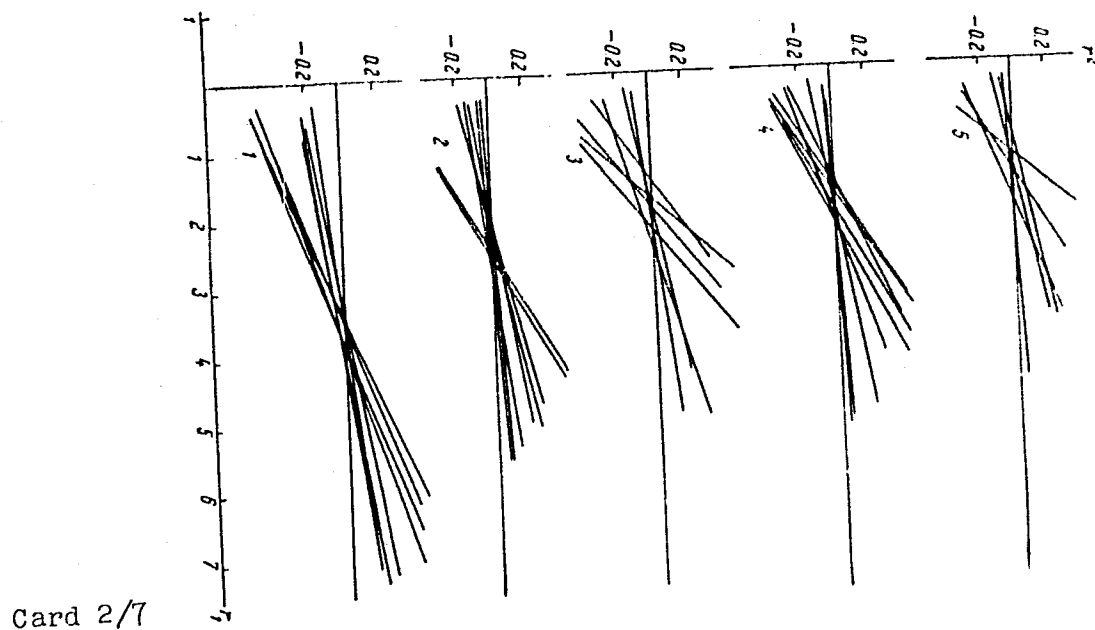
TITLE: Copolymerization of Unsaturated Polyesters With Vinyl Monomers. V. Copolymerization of Poly(1,3-Butylene Glycol Fumarate) With Vinyl Alkyl Ethers

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 257-263 (USSR)

ABSTRACT: Effect of the structure of vinyl ethers on their activity in the copolymerization with unsaturated polyesters was studied. Copolymerization of poly(1,3-butylene glycol fumarate) with vinyl isoamyl, vinyl n-amyl, vinyl isobutyl, vinyl n-butyl, and vinyl n-propyl ethers was conducted according to the procedure described in the previous work (Spasskiy and others, ZhOKh, 30, 250, 1960). Copolymerization constants (see Fig. 1), data concerning the composition, and mechanical properties of the copolymers obtained are given. The following conclusions are made: about 60% of the double bonds of the polyester remain

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77396 SOV/79-30-1-57/78



Card 2/7

Copolymerization of Unsaturated Polyesters  
With Vinyl Monomers. V. Copolymerization of  
Poly(1,3-Butylene Glycol Fumarate) With Vinyl  
Alkyl Ethers

77396  
SOV/79-30-1-57/78

Fig. 1. Graphical determination of copolymerization constants of poly(1,3-butylene glycol fumarate) and vinyl alkyl ethers. (1) Vinyl isoamyl ether ( $r_1 = 3.8 \pm 0.7$ ;  $r_2 = 0$ ); (2) vinyl n-amyl ether ( $r_1 = 2.7 \pm 0.7$ ;  $r_2 = 0$ ); (3) vinyl isobutyl ether. ( $r_1 = 2.0 \pm 0.7$ ;  $r_2 = 0$ ); (4) vinyl n-butyl ether ( $r_1 = 1.8 \pm 0.5$ ;  $r_2 = 0$ ); (5) vinyl n-propyl ether ( $r_1 = 1.6 \pm 0.5$ ;  $r_2 = 0$ ).

Caption for Fig. 1.

unchanged at 15-20% conversion; the activity of the vinyl ethers (in respect to the fumarate unit) does not depend on their structure; uniform (in respect to composition) copolymer is formed when the ratio

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Copolymerization of Unsaturated Polyesters  
With Vinyl Monomers. V. Copolymerization of  
Poly(1,3-Butylene Glycol Fumarate) With Vinyl  
Alkyl Ethers

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SOV/79-30-1-57/78

polymer: vinyl ether is not less than 9:1; the thermo-  
mechanical investigations of the copolymers obtained  
show that the quoted copolymerization constants are  
correct (see Figs. 4, 5, and 6). There are 4 tables;  
6 figures; and 16 references, 5 U.S., 11 Soviet. The  
U.S. references are: F. M. Lewis, C. Walling, W.  
Cummings, E. R. Briggs, F. R. Majo, J. Am. Chem. Soc.,  
70, 1519 (1948); F. M. Lewis, C. Walling, W. Cummings,  
E. R. Briggs, W. J. Wenisch, J. Am. Chem. Soc., 70,  
1527 (1948); F. M. Lewis, F. R. Majo, J. Am. Chem.  
Soc., 70, 1533 (1948); F. R. Majo, C. Walling, F. M.  
Lewis, J. Am. Chem. Soc., 70, 1523 (1948); E. C.  
Chapin, E. G. Hain, C. K. Mills, J. Polymer Sci., 4,  
597 (1949).

ASSOCIATION: Ural Branch of the Institute of Chemistry, Academy  
of Sciences, USSR (Ural'skiy filial AN SSSR, Institut  
khimii)

SUBMITTED: July 30, 1958

Card 4/7

Copolymerization of Unsaturated Polyesters  
With Vinyl Monomers. V. Copolymerization of  
Poly(1,3-Butylene Glycol Fumarate) With Vinyl  
Alkyl Ethers

77396

SOV/79-30-1-57/78

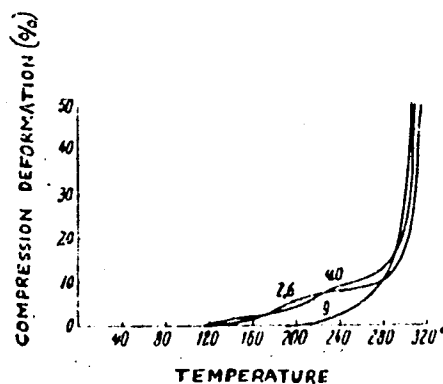


Fig. 4. Thermomechanical curves of copolymers of poly-(1,3-butylene glycol fumarate) and vinyl n-butyl ether. The figures on the curves are the moles of polymers for 1 mole of vinyl ether.

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Copolymerization of Unsaturated Polyesters  
With Vinyl Monomers. V. Copolymerization of  
Poly(1,3-Butylene Glycol Fumarate) With Vinyl  
Alkyl Ethers

77396

SOV/79-30-1-57/78

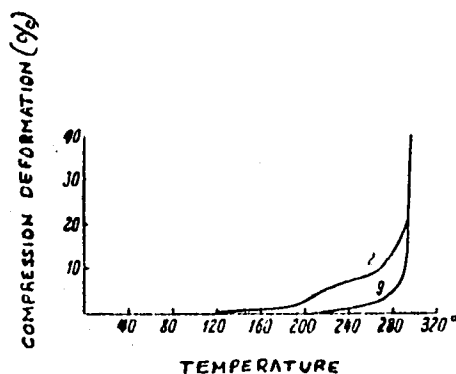


Fig. 5. Thermomechanical curves of copolymers of poly-(1,3-butylene glycol fumarate) and vinyl isoamyl ether.

Card 6/7



Copolymerization of Unsaturated Polyesters  
With Vinyl Monomers. V. Copolymerization of  
Poly(1,3-Butylene Glycol Fumarate) With Vinyl  
Alkyl Ethers

77396

SOV/79-30-1-57/78

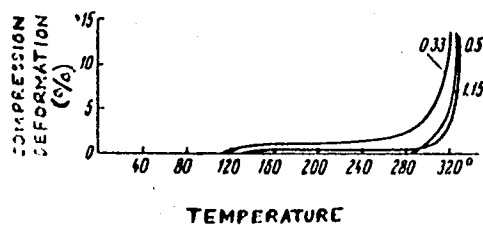


Fig. 6. Thermomechanical curves of copolymers of  
poly(1,3-butylene glycol fumarate) and styrene.

Card 7/7

5.3300

77653  
SOV/80-33-2-28/52

AUTHORS: Gavrilov, B. G., Gulin, Ye. I., Lesnikov, A. P., Tarasov, A. K.

TITLE: Preignition Conversion of Methane Hydrocarbons in Internal Combustion Engines

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 421-424 (USSR)

ABSTRACT: The preignition conversion of paraffins (n-hexane, n-heptane, n-octane, 2,3-dimethylpentane, 2,2,3-trimethylbutane, and 2,2,4-trimethylpentane) were investigated in a one-cylinder Waukesha engine with adjustable compression ratio. The engine was heated up by running normally on B-70 gasoline; the ignition and the gasoline supply was then cut off and the flywheel turned by an electric motor until a predetermined upper temperature was reached. The supply of the investigated hydrocarbon was then turned on, the gaseous mixture of the hydrocarbons with air was aspirated into the cylinder,

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Preignition Conversion of Methane  
Hydrocarbons in Internal Combustion  
Engines

77653  
SOV/80-33-2-28/52

compressed without ignition, and expelled into a large, water- or dry ice-cooled flask. The tests were made at 1,000 rpm, 110° temperature of the gaseous mixture, and only a 4.33 compression ratio to avoid the self-detonation of the mixture. The analysis of the compression products showed that the chief process occurring in from 150 to 300° C and 250 to 400° C was the thermal decomposition of the molecules and the formation of unsaturated hydrocarbons. Branched hydrocarbons showed higher stability of the molecular structure than normal hydrocarbons. The rate of molecule decomposition was in direct ratio to the amount of the hydroperoxides formed and the total oxidizability of the hydrocarbons. The insignificant amount of the hydrocarbon conversion (about 1%) during the 0.015 sec time of the compression cycle determines, nevertheless, the direction and character of the fuel combustion in the in the engine. There are 2 tables; and 8 references,

Card 2/3

Preignition Conversion of Methane  
Hydrocarbons in Internal Combustion  
Engines

77653  
SOV/80-33-2-28/52

2 U.S., 1 U.K., 5 Soviet. The U.S. and U.K. refer-  
ences are: A. Fallah, R. Long, F. Garner, Fuel, 1, 4  
(1952); A. Pahnke, P. Cohen, B. Sturgis, Ind. Eng. Chem.,  
46, 5, 1024 (1954); G. Lappin, Anal. Chem., 23, 541  
(1951).

ASSOCIATION: A. A. Zhdanov Leningrad State University (Leningradskiy  
gosudarstvennyy universitet imeni A. A. Zhdanova)

SUBMITTED: July 8, 1959

Card 3/3

TARASOV, A.I.; TSKHAY, V.A.; SPASSKIY, S.S.

Composition equations for three-component copolymers. Part 2.  
Vysokom. soed. 3 no.1:14-20 Ja '61. (MI A 1412)

1. Institut khimii Ural'skogo filiala AN SSSR.  
(Polymers)

FRCLCVSKIY, P.A.; Primali uchastiye: ANDERS, V.R.; REMNEV, V.F.;  
BULAKH, Ye.S.; KHURSHUDYANTS, I.K.; YATSENKO, P.G.; TARASOV, A.I.;  
IOGANSON, A.V.; LULOVA, N.I.; KURDYAVTSEVA, N.A.

Kh.L-3 laboratory chromatograph. Khim. i tekhn. topl. i masel  
6 no. 7: 44-49 J1 '61. (MIRA 14:6)

1. Spetsial'noye konstruktorskoye byuro po avtomatike v nefte-  
pererabotke i neftekhimii. (Gas chromatography)

26521  
S/065/61/000/008/009/009  
E194/E135

5.5600

AUTHORS:

Lulova, N.I., Piguzova, L.I., Tarasov, A.I., and  
Fedosova, A.K.

TITLE:

Checking the quality of synthetic samples of  
molecular sieve type adsorbents by gas chromatography

PERIODICAL:

Khimiya i tekhnologiya topliv i masel,  
1961, No. 8, pp. 59-63

TEXT:

The VNII NP (All-Union Scientific Research Institute  
of the Petroleum Industry) is developing molecular sieve  
adsorbents and in this connection it was necessary to develop a  
method for assessing the quality of samples of molecular sieves.  
The method is based on the possibility of chromatographic separation on  
molecular sieves of such components as oxygen and nitrogen, which  
are not separated by other adsorbents. The instrument used was a  
standard chromatograph type ХЛ-3 (KhL-3) which was described in  
an article by P.A. Frolovskiy (Ref. 4; Khimiya i tekhnologiya  
topliv i masel, No. 7, 1961, pp. 44-49). Samples of molecular  
sieve were charged into the chromatograph column, which was 1 m  
long, 6 mm in diameter, with a thermostat temperature of 40-45 °C.

Card 1/3

Checking the quality of synthetic ... 26524  
S/065/61/000/008/009/009  
E194/E135

Hydrogen was passed at a rate of 120 ml per minute and argon at 40 ml per minute. The weight of zeolite in the column was 21 g. The tests were made with a standard four component gas mixture:

Oxygen ..... 2.0 - 4.0 % volume  
Nitrogen ..... 7.5 - 15.0 % volume  
Methane ..... 60.0 - 65.0 % volume  
Carbon monoxide ..... 21.0 - 25.0 % volume

Linde molecular sieves grade 5A (5A) gave clear separation of all components of this mixture under the stated conditions in three minutes. Each newly synthesized specimen of zeolite was tested under analogous conditions to obtain identical chromatograms in analysing this gas mixture. This method of checking molecular sieves is simple and quick. A considerable number of zeolite samples were tested in various stages of synthesis and those which gave good results in gas adsorption chromatography were also good in other analyses such as X-ray analysis and determination of water content. In order to compare the degree of activity of different samples certain chromatographic parameters were worked out, namely, the retention volume, the Henry coefficient and the separation factor, all of which are very suitable for general

Card 2/3



26524

Checking the quality of synthetic ... S/065/61/000/008/009/009  
E194/E135

characterisation of adsorbents. The gas chromatography method was also used to check qualitative changes in adsorbents during the process of heat treatment. Reactivation by heat treatment was carried out at various temperatures: results were good at 650 °C, better at 700 °C, but raising the temperature to 800 °C decreased the activity of the molecular sieve.

There are 3 figures, 2 tables and 8 references: 4 Soviet and 4 English. The English language references read:

Ref.1: Petroleum Refiner, Vol.38, No.37, 136-140, 1957.

Ref.3: S.A. Green, M.L. Moberg, E.M. Wilson. Anal. Chem. No.9, 1369-1370.

Ref.5: R.M. Barrer. Brennst Chem. B.C. Vol.35, 21/22.

Ref.2: R. Miltor. Adsorbents of the Molecular-sieve Type, American Patent No. 2882244, 14.4.59.

ASSOCIATION: VNII NP

Card 3/3

TAKASE, H.L.

128

PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye  
(Synthetic Zeolites: Production, Investigation, and Use). Mos-  
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)  
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh  
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor  
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.  
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged  
in the production of synthetic zeolites (molecular sieves), and  
for chemists in general.

Card 1/12

Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGES: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Foreword

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Dubinin, M. M. Introduction

5

Card 2/123

Synthetic Zeolites: (Cont.)

SOV/6246

- Tsitishvili, G. V., and G. D. Bagratishvili. IR Spectra of Water and Heavy Water Adsorbed on Zeolites 38
- Shirinskaya, L. P., and N. F. Yermolenko. Applicability of the General Laws of Ion Exchange to Exchange on Synthetic Zeolite CaA 41
- Neymark, I. Ye., A. I. Rastrenenko, V. P. Fedorovskaya, and A. S. Plachinda. Variation of Adsorption Properties of Zeolites as a Function of the Degree of Sodium-Ion Substitution by Other Cations 46
- Neymark, I. Ye., M. A. Piontkovskaya, A. Ye. Lukash, and R. S. Tyutyunnik. Variation of the Selective Capacity of Synthetic Zeolites 49
- Lulova, N. I., L. I. Piguzova, A. I. Tarasov, and A. K. Fedosova. Investigation of Synthetic Zeolites With the Aid of Gas Chromatography 59

Card 512-3/3

S/204/62/002/006/007/012  
E075/E192

AUTHORS: Lulova, N.I., Tarasov, A.I., Kuz'mina, A.V., and  
Koroleva, N.M.

TITLE: Chromatographic analysis of gaseous streams on the  
ethylene plant

PERIODICAL: Neftekhimiya, v.2, no.6, 1962, 885-891

TEXT: Analyses of liquified gases and methane and ethylene  
determination in the light hydrocarbon distillate, and determina-  
tion of C<sub>2</sub> hydrocarbons and propane in propane-propylene fractions  
were carried out using the reverse flow method in a modified  
chromatograph XПA-2 (KhPA-2). For the liquified gas  
(C<sub>3</sub> - 40 to 60%; C<sub>4</sub> - 20 to 40%; C<sub>5</sub> - 10%), best results were  
obtained on silica gel MCM (MSM) treated with 1.5 wt.% soda and  
13% glycerine, or on Inza brick treated with 20 wt.% propylene  
glycol. For the light condensate silica gel ACK (ASK) treated  
with 0.5% soda and 2% glycerol was found to be the most satisfac-  
tory column. It separated adequately ethylene and ethane, the  
fuel analysis time being 4 - 4.5 min. The best column for the  
determination of CH<sub>4</sub> in the propane-propylene fraction was  
Card 1/2

Chromatographic analysis of gaseous... S/204/62/002/006/007/012  
L075/B192

silica-alumina, for the determination of propane modified silica gel ASK or activated alumina, for the determination of C<sub>2</sub> hydrocarbons activated alumina or silica-alumina. The time of analysis in all cases did not exceed 4 - 5 min. There are 5 figures and 4 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefiti i gaza i polucheniyu iskusstvennogo zhidkogo topliva  
(All-Union Scientific Research Institute for the Distillation of Petroleum and Gas and the Production of Synthetic Liquid Fuel)

SUBMITTED: May 22, 1962

Card 2/2

LULOVA, N.I.; PIGUZOVA, L.I.; TARASOV, A.I.; FEDOSOVA, A.K.

Gas chromatography used for investigating adsorbents of  
molecular sieve type. Khim.i tekhn.topl.i masel 7 no.5:70-73  
My '62. (MIRA 15:11)  
(Adsorbents) (Gas chromatography)

LULOVA, N.I.; TARASOV, A.I.; FEDOSOVA, A.K.; LEONT'YEVA, S.A.

Use of gas chromatography for investigating gases and light  
gasolines. Khim.i tekhn.topl.i masel 7 no.9:14-19 S '62.  
(MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.  
(Hydrocarbons) (Gas chromatography)



L 14262-63

EPR/ENP(j)/EPF(c)/EWT(m)/BDS/ES(s)-2

AFTC/ASD/ESD-3/SSD

Ps-4/Pc-4/Pr-4/Pt-4 FM/WW  
ACCESSION NR: AP3004770

8/0191/63/000/008/0020/0022

AUTHOR: Tarasov, A. I.; Spasskiy, S. S.

TITLE: Copolymers of poly(1,3-butylene fumarate) with methyl methacrylate and butyl vinyl ether

SOURCE: Plasticheskiye massy\*, no. 8, 1963, 20-22

TOPIC TAGS: poly(1,3-butylene fumarate phthalate), methyl methacrylate, butyl vinyl ether, copolymer, benzoyl peroxide, thermomechanical curve, copolymer electric strength, copolymer dielectric strength, copolymer resistivity, copolymer mechanical properties, copolymer Vicat softening point

ABSTRACT: Copolymer of poly(1,3-butylene fumarate phthalate) (I), methyl methacrylate, and butyl vinyl ether have been synthesized for the first time and their thermomechanical, physicomechanical, and electrical properties studied. Polyester I was prepared from 1,3-butanediol, maleic anhydride, and phthalic anhydride in a 1/0.7/0.03 molar ratio. Copolymerization was conducted in the presence of 0.5% of benzoyl peroxide in a metal mold. The total monomer content of the copolymers was 24 and 40%. They are transparent solids insoluble

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L 14262-63

ACCESSION NR: AF3004770

in all solvents. The physicochemical and electrical properties of copolymer No. 3, for example, which contains 7% butyl vinyl ether [methyl methacrylate content unspecified], are as follows: density, 1.230 g/cm<sup>3</sup>; Vicat softening point, 180C; impact strength, 14-25 kg-cm/cm<sup>2</sup>; bending strength, 460 kg/cm<sup>2</sup>; hardness, 4.0 kg/mm<sup>2</sup>; electric strength, 46.6 kv/mm; dielectric constant, 5.0-8.5; loss tangent at 50 cps, 0.07; volume resistivity,  $0.34 \times 10^{15}$  ohm cm; and surface resistivity,  $0.72 \times 10^{14}$  ohm. Analysis of the thermomechanical curves revealed the effect component ratio has on copolymer mechanical properties. Plasticity is determined by methyl methacrylate, which tends to form linear poly(methyl methacrylate) chains that graft onto I. Butyl vinyl ether has two effects: it crosslinks polyester I chains with short linkages, and it terminates poly(methyl methacrylate) chain growth. Both effects of the ether tend to increase copolymer strength and stiffness. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28Aug63

ENCL: 00

SUB CODE: CH, MA

NO REF SOV: 006

OTHER: 000

Card 2/2

LULOVA, N.I.; TARASOV, A.I.; KUDRYAVTSEVA, N.A.; ZEMSKOVA, Ye.I.

Chromatographic method of analysis of gases of petroleum refining.  
Trudy Kom.anal.khim. 13:238-246 '63. (MIRA 16,5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gaz i polucheniya zhidkogo topliva.  
(Petroleum refining) (Gas chromatography)

KUDRYAVTSEVA, N.A.; TARASOV, A.I.; SHCHIPANOVA, A.I.

Quantity of liquid petrolatum during modification with  
tripoli from the Zikeev Mine for chromatographic separation  
of hydrocarbons. Khim. i tekhn. topl. i masel 8 no.10:59-62  
0 '63. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pere-  
rabortke nefi i gazov i polucheniye iskusstvennogo zhidkogo  
topliva.

LULOVA, N.I.; TARASOV, A.I.; FEDOSOVA, A.K.; LEONT'YEVA, S.A.; KVASOVA, V.A.

Analysis of the wide fractions of straight-run gasoline by gas-  
liquid chromatography. Khim. i tekhn. topl. i masel 8 no.12:  
21-28 D '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gazov i polucheniye iskusstvennogo zhidkogo topliva.

KUDRYAVTSEVA, N.A.; TARASOV, A.I.; Primali uchastiye: SHCHIPANOVA, A.I.;  
RYASOVA, Ye.S.; CHESNOKOVA, R.I.

Chromatographic investigation of gaseous hydrocarbons dissolved in  
oil. Khim i tekhn. topl. i masel 9 no.5:32-36 5 My'64  
(MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gaza i polucheniya iskusstvennogo zhidkogo topliva (for  
Kudryavtseva, Tarasov).

L 27786-65 EWT(m)/EPA(s)-2/EPF(c)/T/EWP(j)/EPR/EWA(c) Pc-4/Pr-4/Ps-4/Pt-10

WW/RM

ACCESSION NR: AP5004308

S/0191/65/000/002/0013/0015

AUTHOR: Spasskiy, S. S.; Kodolov, V. I.; Kopylov, A. I.; Obolonskaya, N. A.; Tarasov, A. I. 44

TITLE: The synthesis of polyethyleneglycol-fumarate-phenylphosphinate and its copolymerization with vinyl monomers

SOURCE: Plasticheskiye massy, no. 2, 1965, 13-15

TOPIC TAGS: polyethyleneglycol synthesis, polyfumarate synthesis, polyphenylphosphinate synthesis, vinyl copolymer, phosphorylated polymer, styrene copolymer, methyl methacrylate copolymer, unsaturated polyester

ABSTRACT: Phosphorus-containing, unsaturated, hetero-chain polymers were prepared and copolymerized with styrene, or with a mixture of styrene and methyl methacrylate to obtain stable, solid and non-combustible resins. Diethylphenylphosphinate was prepared by Gafter's method (Fosforoorganicheskiye monomery i polimery, Izd. AN SSSR, 1960) and polyethyleneglycol fumarate was obtained by melt condensation of maleic anhydride with ethyleneglycol (1:3) for 2 hrs. at 120C and subsequently at 180C to an acid number of 1-3 mg KOH/g, removing excess glycol under 10 mm Hg pres-

Card 1/2

L 27786-65

ACCESSION NR: AP5004308

0

sure. The product contained 9-10% hydroxyl groups and was reesterified with an equivalent amount of diethylphenylphosphinate under nitrogen, 6 hrs. at 160C and 18-25 hrs. at 180C. Removal of low-molecular compounds at 180C and 5 mm Hg gave unsaturated polyesters of 80-85 acid number, negligible hydroxyl content, 400-500 molecular weight, and 7% phosphorus content. The ester was polymerized in metal forms with styrene and 0.2-0.5% bis-tert.-butyl peroxide or 0.2% benzoyl peroxide for 8-10 hrs. at 80C and 12 hrs. at 100C, or with a mixture of styrene-methyl methacrylate and 0.2% benzoyl peroxide for 15-20 hrs. at 100C. Analysis of the products of reesterification indicated that polymerization does not occur during this process and that only one ethoxy group of the phenylphosphinate is replaced by low molecular polyfumarate. Formulas for the mixture of polyesters are proposed. Copolymers of 80 and 70% polyester, 10 and 15% styrene, and 10 and 15% methyl methacrylate had densities of 1.28 and 1.3 g/cc, they adsorbed 0.37 and 0.25% water, had impact strengths of 20-25 and 15 kg.cm/cm<sup>2</sup> and a weight loss of 6 and 10% at 200C in 24 hrs., and were self-extinguishing with a weight loss of 5 and 9%, respectively. Elongation under load increased rapidly at 250-300C. Orig. art. has: 4 tables, 1 figure, and 5 formulas.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: 0C

NO REF SOV: 007

OTHER: 000

Crd 2/2



L 35550-65 EWT(m)/EWP(j)/T Pc-4 RM  
ACCESSION NR: AP5008197

S/0286/65/000/005/0070/0070

AUTHORS: Tarasov, A. I.; Bulatov, M. A.

TITLE: A method for producing thermosetting polymers.<sup>15</sup> Class 39, No. 168876<sup>15-B</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 70

TOPIC TAGS: thermosetting material, polymer, copolymerization

ABSTRACT: This Author Certificate presents a method for producing thermosetting polymers by copolymerization of unsaturated polyesters (having a double bond such as the maleic type in the principal chain) and with another unsaturated polyester in the presence of a peroxide initiator. The physico-mechanical properties of the polymers thus obtained are improved by using, as the other polyester, an unsaturated polyester having a double bond, such as the allyl type in the side chain.

ASSOCIATION: none

SUBMITTED: 13Jul62

ENCL: 00

SUB CODE: MT, OC

NO REF SOV: 000

OTHER: 000

Card 1/1

LJLOVA, N.I.; TARASOV, A.I.; KUZ'NETSA, A.V.; KOROLEVA, N.M.

Chromatographic analysis of gas flows on a unit for obtaining  
ethylene. Neftekhimiia 2 no.6:885-891 H-D '62. (IRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gaza polucheniya iskusstvennogo zhidkogo topliva.

SPASSKIY, S.S.; KODOLOV, V.I.; KOPYLOV, A.I.; OBOLONSKAYA, N.A.; TARASOV, A.I.

Synthesis of polyethyleneglycolfumarate phenylphosphinate and its  
copolymerization with vinyl monomers. Plast. massy no.2:13-15 '65.  
(MIRA 18:7)

L 56679-65 EWT(m)/EPF(c)/EWP(j)/T Pc-l/Pr-l RM

ACCESSION NR: AP5017835

UR/0286/65/000/011/0076/0076  
678.674.002.2

AUTHOR: Tarasov, A. I.; Kodolov, V. I.; Spasskiy, S. S.

TITLE: A method for producing unsaturated phosphorus-containing polyesters.  
Class 39, No. 171554

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 76

TOPIC TAGS: polymer, polyester plastic, unsaturated compound

ABSTRACT: This Author's Certificate introduces a method for producing unsaturated phosphorus-containing polyesters by polycondensation of dichloroanhydrides of phosphonic acids with hydroxyl-containing compounds during heating in a stream of nitrogen. A wider selection of polymers of this type is provided, and their polymerization activity is improved by using polyunsaturated oligomers, e.g. polyallyl glycerin phthalate, as the hydroxyl-containing compound.

ASSOCIATION: none

SUBMITTED: 14Feb64

ENCL: 00

SUB CODE: 00, 00

Card 1/1

NO REF SOV: 000

OTHER: 000

L 53614-65 EWT(m)/IWP(t)/EWP(b) IJP(c) JD  
ACCESSION NR: AP5011694

UR/0065/65/000/005/0058/0060  
543.21,655.521.5

AUTHORS: Sosnina, N. P.; Tarasov, A. I.; Muzychenko, V. P.

TITLE: Determination of zinc and lead in additives and in oils containing additives

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 5, 1965, 58-60

TOPIC TAGS: zinc, lead, adsorption, anionite, lubricant, lubricant additive, oil, chromatographic analysis/ EDE IOP anionite

ABSTRACT: A method for rapid determination of Zn and Pb contents in different additives and oils containing them was developed by the VNII NP. It is based on the ion-exchange chromatographic separation of elements on the EDE-IOP anion-exchanging polymer, with subsequent titration in the presence of xylene orange. The study of Zn and Pb sorption on EDE-IOP under dynamic conditions at different hydrochloric acid concentrations revealed that they were adsorbed by the anionite treated with 3N solution of the acid. In the 0.5 solution the EDE-IOP adsorbed all of lead and no zinc. Neither Zn nor Pb were adsorbed in the 0.03N solution. Both elements adsorbed simultaneously by the anionite in the 3N acid solution were

Card 1/2

L 53614-65

ACCESSION NR: AP5011694

separated by washing with 0.5N hydrochloric acid (for Zn) and 0.03N (for Pb). The metals were titrated separately with the 0.02N solution of the trilon B with the xylenol orange until the dark red color changed to lemon-yellow. These metals were also determined in the additives to oils and oils containing barium, phosphorus and sulfur. Deviations between the analytical data obtained by this method and those of ASTM were within the limits of allowable error. The determination of Zn and Pb when both were present in the substances containing barium, phosphorus, and sulfur required 5 to 6 hours. The method is recommended for scientific research institutes and plant laboratories. Orig. art. has: 2 tables.

ASSOCIATION: VNII NP

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, G, C

NO REF SOV: 008

OTHER: 004

Card 2/2

KURTYAVTSEVA, N.A.; TARASOV, A.I.; LUKOVA, N.Y.; SHCHERBANOVA, A.I.

Selecting the optimum conditions of ultrasonographic separation  
for fillers made from Alkeev deposit tripoli. Khim. i tekhn.  
topl. i masel 10 no.10:55-58 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po generatsiike  
nedel i gazov i polucheniyu tekhnobvennogo zhidkogo topliva.

(A) L 12914-66 EWT(m)/EWP(j) RM

ACC NR: AP6000957

SOURCE CODE: UR/0286/65/000/022/0041/0042

AUTHORS: <sup>44,55</sup>Novikova, T. V.; <sup>44,55</sup>Tarasov, A. I.; <sup>44,55</sup>Levitskaya, O. M.; <sup>44,55</sup>Palishkina, R. D.

ORG: none

TITLE: A method for obtaining varnish coatings. <sup>15,44,55</sup>Class 22, No. 176345 <sup>31</sup>  
<sup>B</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 41-42

TOPIC TAGS: varnish, maleic acid, polyester, styrol, glycerin

ABSTRACT: This Author Certificate presents a method for obtaining varnish coatings based on polyester maleinate resin and styrol. To prevent stickiness of the coating, to increase its durability, and to shorten the hardening time of the varnish, a polyester of saturated two-base acid and allyl ester of glycerin, such as polyallyl glycerin phthalate, are added to the above ingredients.

SUB CODE: 11/

SUBM DATE: 01Jun64

Card 1/1 HW

UDC: 667.6:678.766.44



SHIKHOV, V.N.; ANISIMOV, V.A.; Prinimali uchastiye: MAKURIN, F.I.;  
NIKULINA, L.P.; TKACHEV, V.V.; NEMTSEV, I.I.; MIKHEYEVA, G.P.;  
GUSEV, V.P.; TARASOV, A.I.

Measures for the control of static electricity in rubber cement  
coaters. Kauch. i rez. 24 no.11:42-45 '65. (MIRA 19:1)

1. Ural'skiy politekhnicheskiiy institut, Sverdlovsk, i Sverdlovskiy  
zavod rezinovykh tekhnicheskikh izdeliy.

L 02508-67 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l)  
 ACC NR: AR6016325 JD/WW/DJ (A) SOURCE CODE: UR/0273/65/000/012/0007/0007

AUTHOR: Tarasov, A. I.

TITLE: Wear of the antifriction layer on bushings as a function of the dynamic imbalance of crankshafts

SOURCE: Ref. zh. Dvigateli vnutrennego sgoraniya, Abs. 12.39.50

REF SOURCE: Tr. Novosib. s.-kh. in-ta, v. 25, no. 5, 1964, 41-46

TOPIC TAGS: antifriction material, bushing, wear resistance, engine crankshaft

ABSTRACT: Specimens were tested for wear by the "shaft-partial bushing" method with a moving journal on a remodelled MUI-6000 machine. Wear was determined by the hole method. The tests were done at 90° using AK-10 lubricant at a rate of 4.5 cm<sup>3</sup>/min. The results showed that the rate of wear increases from 3.2 to 4-6 μ/hr with an increase in the nonequilibrium forces from 10 to 20% of the fundamental load. The constant component of pressure on the bearing has a considerable effect on wear: the effect of nonequilibrium forces increases with the magnitude of this component.  
 [Translation of abstract]

SUB CODE: 13

Card 1/1 *fla*

UDC; 621.432-233.21,620.178,16

TARASOV, A.I., inzh.

Grounding systems in 500 kv. substations. Elek. sta. 36 no.2;  
68-70 F '65.

(MIRA 18:4)

GAVRILOV, B.G.; GULIN, Ye.I.; LESNIKOV, A.P.; TARASOV, A.K.

Preignition conversions of hydrocarbons of the methane series  
in an internal combustion engine. Zhur.prikl.khim. 33 no.2:  
421-424 F '60. (MIRA 13:5)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.  
Zhdanova.

(Hydrocarbons) (Gas and oil engines)

TARASOV, A. F.

29200. Primenenie stali 16kggt dlya shesteren zadnego mosta i korobok peredach mashiny GAZ-51. Avtomob prom-st', 1949, No. 9, S. 15-17

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

TARASOV, A.M.; SVESHNIKOV, D. A. ; KEMSEV, P. G.      Engrs.

The Arrangement for testing of metal shot for smashing and the  
evaluation of metal shot quality

Vest Mash p. 74, Oct 51

TARASOV, A. M., SVESHNIKOV, D. A., KEMAYEV, F. G.

Shot peening

Assembly for testing shot for fragility and evaluating the quality of the shot. Vest.  
mash. 31, No. 10, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September, 1952, ~~1953~~x Unclassified.

TARASOV, A.M., SVESHIKOV, D.A.

Metals--Finishing

Use of cast iron shot to increase the fatigue resistance of automobile parts by means of shot blasting. Avt.trakt.prom., no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, JUNE 1952, ~~1-2~~, Uncl.



1. TARASOV, A. M., Engr., SVESHNIKOV, D. A., Engr.

2. SSSR (600)

4. Metal<sup>S</sup>-Fatigue

7. Use of steel pellets for surface hardening of machine parts.  
Vest. mash. 32 No. 8, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

TARASOV, A. M.

Gaseous cyanidization in a continuous furnace. A. M. Tarasov and H. A. Stetsenko. *Vestnik Mashinostroyeniya* No. 12, 1952, 13 (1952). Automobile gears made of 0.34% C, 0.63 Mn, 0.23 Si, 0.08 Cr steel were cyanided at 840-850° in a stream of "pyrobenzol" vapors fed at a rate of 2 l./hr. and  $\text{NH}_3$  introduced at a rate of 9 and 25 l./hr. A case 0.2-0.5 mm thick was produced. Softer cases were formed at the 9 l./hr. rate. The C content remained 0.8-1.1% in both cases. Their wear resistance was much greater than of carburized and heat-treated Cr-Ni-Mn steel gears. J. D. Galt

TARASOV, A.M.

B. T. R.  
V.3 No. 3  
Mar. 1954  
Metals- Heat  
Treatment

3776\* Cold Hardening of Metal in a Static-Stressed State.  
(Russian.) D. A. Sveshnikov and A. M. Tarasov. *Vestnik  
Mashinostroyeniya*, v. 33, no. 8, Aug. 1953, p. 67-70.  
Studies were made of residual stresses from compression and  
direct hardening of surface layers. Discusses importance of each.  
Graphs, photographs. 5 ref.

TARASOV, A.M., redakter.

["Belarus" universal farm tractor; manual on its maintenance  
and use] Universal'nyi prepashnoi traktor "Belarus"; ruko-  
vodstvo po ukhodu i ekspluatatsii. Minsk, Gos.izd-vo BSSR, 1954.  
(Tractors) (MLRA 9:1)

TARASOV, A. M.

USSR/Miscellaneous

Card 1/1 : Pub. 12 - 8/15

Authors : Tarasov, A. M., and Stetsenko, B. A.

Title : Use of kerosene as a carburizing agent for gaseous cementation

Periodical : Avt. trakt. prom. 2, 25-28, Feb 1954

Abstract : The use of lighting kerosene (standard GOST 4753-49) in the role of carburizing agent for gaseous cementation in continuous-operation furnaces, with direct feeding of the liquid carburizing medium and in shaft furnaces, is described. The strength of details cemented with lighting kerosene and pyro benzene, is identical. Methods of reducing the soot formation and improving the circulation of the carburizing agent between the treated details, are presented. Tables; graphs; drawings; illustrations.

Institution : The V. M. Molotov Automobile Plant, Gorkiy

Submitted : .....

TARASOV, A. M.

USSR/ Engineering - Metal hardening

Card : 1/1 Pub. 128 - 14/32

Authors : Tarasov, A. M. and Stetsenko, B. A.

Title : Hardening of metal by a diffusion process with high frequency heating of components.

Periodical : Vest. mash. 34/7, 50 - 52, July 1954

Abstract : Hardening of metal by gas diffusion with high frequency heating of components, is described. General information is given on diffusion processes, hardening, cyanization, temperatures, and types of steel. Illustrations; drawing.

Institution : ...

Submitted : ...

TARASOV, A. M.

✓ Mechanical Properties and Wear Resistance of Gas Cyanided Automobile Parts. A. M. Tarasov and B. A. Stateenko. (Automobil'naya i Traktornaya Promyshlennost', 1955, (3), 21-24). Gear teeth and rear axles are considered and cyaniding conditions are given and fatigue or static load tests tabulated. Hardness, case depth and ultimate breaking loads are shown and wear resistance measured. Gas and liquid cyaniding are compared. Safety precautions are mentioned. *Phys*

TARASOV, A. M.

Intensification of the carburizing process in a solid carburizer for automobile parts. A. M. Tarasov and M. P. Semenchenko (Molotov Automobile Factory, Gorki). *Metallurg, i Obrabotka Metallov* 1955, No. 6, 45-51.—The method employed was raising the carburizing temp. from 910 to 960°, thus decreasing the time by 50%. Specimens of steel 20Kh (C 0.22, Cr 0.78%) and 20KhN4 (C 0.21, Cr 0.56, Ni 1.05, and Mn 0.28%) were coarse grained on being quenched directly from the carburizing temp. but were fine grained after a 2nd heating. Specimens of "fine-grain tendency" heats of these steels showed little grain coarsening at 960° relative to 910°. About the same depth of carburizing was produced in 8 hrs. at 960° as in 13 hrs. at 910°. The surface C content was as much as 0.5% lower at 960°, but there was still some excess cementite. The properties of parts carburized at 910° or 960° were similar. A. O. Guy

2

cf



TARASOV, A.M.

USSR/ Engineering - Processing metal

Card 1/1 Pub. 128 - 22/35

Authors : Tarasov, A. M., and Stetsenko, B. A., Engineers

Title : Defects of cementation in a hard carbonizer

Periodical : Vest. mash. 35/3, 70 - 73, May 1955

Abstract : A description is given of experiments conducted in cementation in a hard carbonizer in place of gas cementation. The method of operation, materials used, temperatures applied, rates of heating and cooling and other points are examined as to their effect on the finished product. The disadvantages of the use of a hard carbonizer in place of gas are pointed out. Four USSR references (1949-1953). Illustrations; diagrams; graphs; table.

Institution : .....

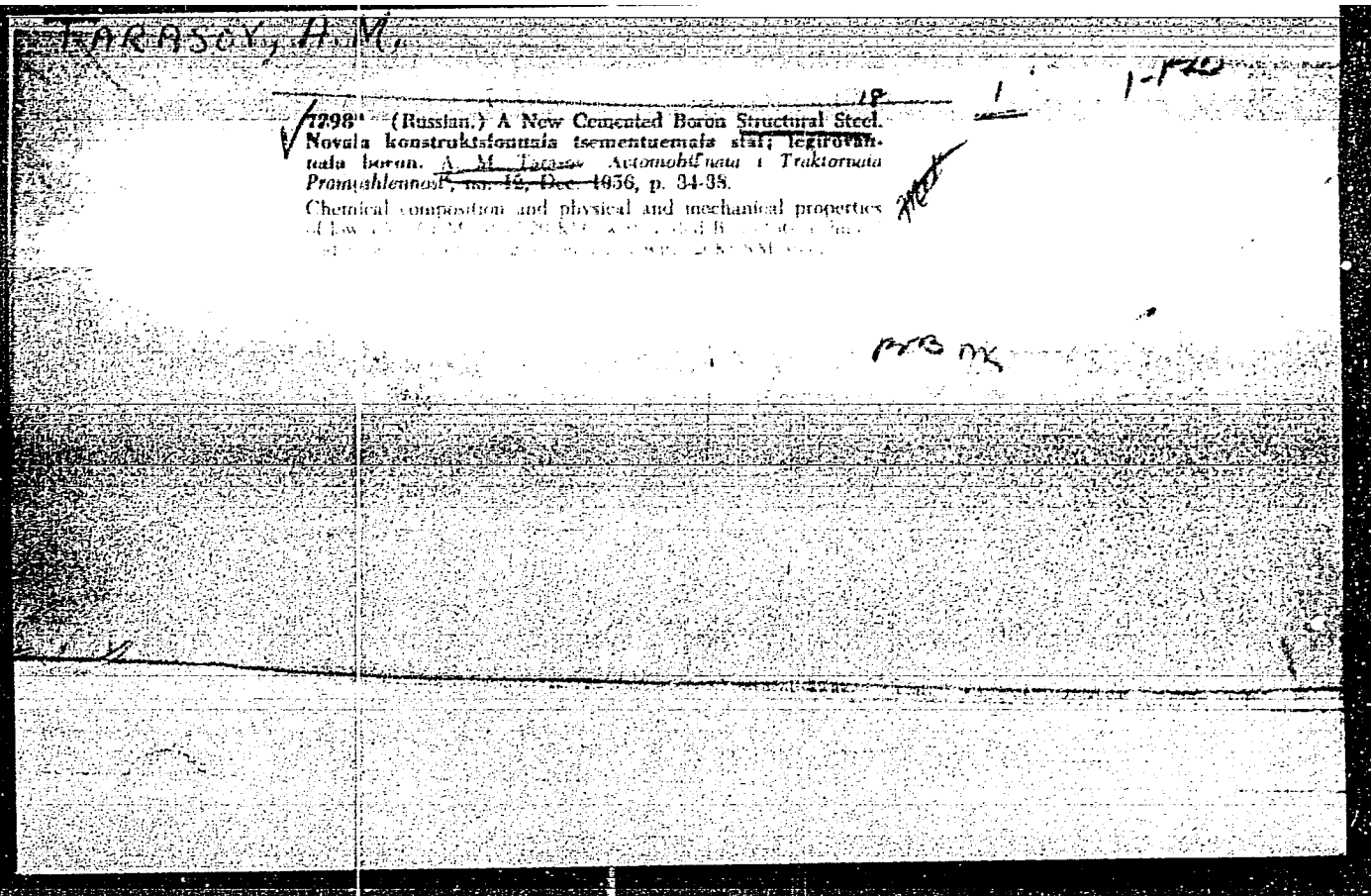
Submitted : .....

BOYKOV, Petr Ivanovich; DRONG, I.I.; PRITSKER, P.Ya.; RUBINSHTAYN, Sh.Ya.;  
~~TARASOV, A.M.~~, inzhener, redaktor; ~~PESTRYAKOV, A.I.~~, redaktor;  
~~FEDOTOVA, A.F.~~, tekhnicheskij redaktor

["Belarus" MTS-1 and MTZ-2 tractors] Traktory "Belarus'" MTS-1  
i MTZ-2. Pod red. A.M.Tarasova. Moskva, Gos. izd-vo selkhoz. lit-ry,  
1956. 350 p. (MLRA 9:12)  
(Tractors)

TARASOV A.M.

Quenching automobile parts in hot media. A. M.  
Tarasov (Mokotov Auto-Plant, Gorki). Automobile. Truck.  
for. 1956, No. 1, 41-4. Quenching alloy steels and  
carburized low-C oil quenchable steels up to 45 mm. diam.  
in molten  $KNO_3$  at 200° leads to less deformation, high-  
surface hardness, and high strength. The practice is de-  
scribed. J. D. Cat



137-58-5-11145

TARASOV, A.M.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 320 (USSR)

AUTHOR: ~~Tarasov, A.M.~~

TITLE: A Layer Method for the Chemical Analysis of Thermochemical Treatment Procedures. (Primeneniye metoda posloynogo khimicheskogo analiza pri issledovanii protsessov khimiko-termicheskoy obrabotki)

PERIODICAL: V sb.: Materialy nauchno-tekhn. konferentsii rabotnikov zavodsk. laboratoriy. Rostov-na-Donu, 1957, pp 41-54

ABSTRACT: The chemical layer analysis is suggested as the most effective method of controlling the process of thermochemical treatment in the course of cementation of metal parts. A layer of definite thickness, removed by means of a lathe from special specimens treated in the same manner as the production parts is subjected to chemical analysis. Experiments revealed differences in the degree of saturation of the carburized layer in parts which have been subjected to cementation with solid and gaseous carburizers. Curves showing the distribution of C in a carburized layer were obtained. Drawbacks of the employment of solid carburizers were revealed. The influence of BaCO<sub>3</sub> as

Card 1/2

137-58-5-11145

A Layer Method for the (cont.)

an activating agent on the nature of C saturation of steel in the process of cementation with a solid carburizer was determined more precisely. Optimal conditions were established for shop processes of cementation. The method described was also employed in the investigation of steels alloyed with small quantities of B. The effect of the B on the process of saturation of steel during cementation was ascertained; a decrease in diffusion became apparent when the B content amounted to 0.004-0.008%. It was demonstrated that the chemical composition of the steel affects the degree of C saturation on the surface of a carburized layer.

1. Metals--Hardening    2. Metals--Thermochemistry    3. Metals--Analysis    Yu. B.

Card 2/2

619

AUTHORS: Tarasov, A.M., Ing. and Semenchko, M.R., Ing.  
(Gorky Automobile Works imeni V. M. Molotov).

TITLE: Influence of the content of  $BaCO_3$  in the carburiser  
on the quality of the carburised<sup>3</sup> layer. (Vliyaniye  
soderzhaniya uglekislogo bariya v karbyurizatore  
na kachestvo tsementovannogo sloya).

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and  
Metal Treatment), 1957, No.5, pp.49-53 (U.S.S.R.)

ABSTRACT: In the Gorky Automobile Works the carburising mixture  
consists of 25% fresh and 75% used carburisation  
material whereby the fresh carburising material  
contains 60 to 70% peat semi-coke, 20-25%  $BaCO_3$ ,  
3.5-5%  $CaCO_3$ , 0.5-1.5%  $SiO_2$  and up to 0.1% S. <sup>3</sup>Data  
collected over two years showed that the  $BaCO_3$  content  
in the carburiser varies between 3 and 11% and for the  
most frequently occurring contents, between 5 and 7%,  
the carbon content on the surfaces of the carburised  
components usually varies between 1.5 to 2.5%,  
although the optimum would be between 0.8 and 1.0%.  
The work described in this paper aimed at determining  
the optimum content of  $BaCO_3$  in the carburisation  
mixture which would ensure <sup>3</sup> obtaining a carburised  
layer with a carbon content near to that of eutectoidal  
saturation. The compositions of the investigated

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619

Influence of the content of  $\text{BaCO}_3$  in the carburiser on the quality of the carburised layer. (Cont.)

steels are given in Table 1, p.50, the carburisation regime and the depths of the carburisation layer in a mixture with various additions of the fresh carburiser are enumerated in Table 2, p.50. The dependence of the carburisation depths on the  $\text{BaCO}_3$  content is plotted in Fig.2, whilst the distribution of the carbon in the carburised layer for various percentages of the content of fresh carburiser is plotted in Fig.3, whilst Fig.4 shows the carbon content in the carburised layer at depths of 0.025, 0.05, 0.1 and 0.3 mm as a function of the  $\text{BaCO}_3$  content in the carburiser for two steels. It was found that changes between 0% and 25% of the fresh carburisation mixture containing 20 to 25% of  $\text{BaCO}_3$  has a negligible influence on the depth of the carburised layer. An increase in the content of  $\text{BaCO}_3$  up to 5% brings about an increase in the depth of the carburised layer and of the zone with above eutectoidal carbon content; further increase, beyond 5%, does not bring about any further increase in the depth of the carburised layer. It is advisable to reduce the content of  $\text{BaCO}_3$  in the carburising mixture to between 1 and 3%. 4 figures, 2 tables; 2 Russian references.

Card 2/2





TARASOV, A.-M.

KISELEV, I.I.; BORISOV, N.I.; YASINOVSKIY, B.S., inzh.; SANNIKOV, Yu.K., inzh.; SOKOLOV, V.A., inzh.; LEVCHENKO, L.D., inzh.; NALOYEV, G.A., inzh.; CHICHAKOV, K.K., inzh.; BARYKIN, V.I., inzh.; FREYDLIN, A.Ya., inzh.; GULYAYEV, A.I., inzh.; STIGNEYEV, Ya.F., inzh.; SHAGANOVA, K.N., inzh.; KHEKLIMSKIY, I.Ye., inzh.; AVROV, A.N., inzh.; DEMIDOVA, M.I., inzh.; NIKIFOROVA, Ye.D., inzh.; KLIBANOVA, F.I., inzh.; CHIVKUNOV, K.I., inzh.; STOROZHKO, I.G., inzh.; NOVAKOVSKIY, Ye.Ya., inzh.; GOYKHTUL', A.O., inzh.; TARASOV, A.M., inzh.; SHISHKO, A.P., inzh.; UVAROV, P.T., ekonomist; DRAGUNOV, M.V., ekonomist; KARANDASHOV, A.A., ekonomist; KONKIN, M.V., ekonomist; GOREV, M.S., ekonomist. Pri- nizali uchastiye: LAPIN, T.I.; RAMENSKIY, Yu.A.; KADINSKIY, B.A.; SOKOLOV, S.D.; STOROZHKO, I.G.; FOMINYKH, A.I.. POLYAKOVA, N., red.; SMIRNOV, G., tekhn.red.

[Organization and improvement of production; practices of the Gorkiy Automobile Plant] Organizatsiia i sovershenstvovanie proizvodstva; opyt Gor'kovskogo avtozavoda. Moskva, Gos. izd-vo polit. lit-ry, 1958. 332 p. (MIRA 12:2)

1. Direktor Gor'kovskogo avtomobil'nogo zavoda (for Kiselev).
2. Glavnyy inzhener Gor'kovskogo avtomobil'nogo zavoda (for Borisov).
3. Gor'kovskiy avtomobil'nyy zavod (for all except Kiselev, Borisov, Polyakova, Smirnov).

(Gorkiy--Automobile industry)

SOV-113-58-8-15/21

AUTHOR: Tarasov, A.M., Candidate of Technical Sciences

TITLE: Steels Used for Motor Parts in the USA (Stali primenyayemye dlya avtomobil'nykh detaley v SShA)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 41-44 (USSR)

ABSTRACT: The article contains the results of an analysis of steels used in the manufacture of the different parts of the transmission and underframe for the 1956 model Ford-500, Dodge-6G-129 and Chevrolet-5700 trucks. The analysis was carried out in the Gor'kovskiy avtozavod (Gor'kiy Motor Vehicles Plant). There are 3 tables, 2 graphs and 4 Soviet references.

ASSOCIATION: Gor'kovskiy avtozavod (Gor'kiy Motor Vehicle Plant)

1. Automobile industry--USA 2. Steel--Applications

Card 1/1

SOV/129-58-9-9/16

AUTHORS: Tarasov, A.M., Candidate of Technical Science and  
Senenchenko, M. R., Engineer

TITLE: The Possibility of Increasing the Carburization  
Temperature Inside a Solid Carburizer to 980°C  
(Vozmozhnost' povysheniya temperatury tsementatsii  
v tverdom karbyurizatore do 980°)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 9,  
pp 39-42 (USSR)

ABSTRACT: The Gorky Automobile Works introduced in 1954 a process  
of carburization inside a solid carburizer at 950°C  
instead of 910°C. In this paper the possibility is  
studied of applying still higher carburization  
temperatures for the purpose of increasing further the  
productivity of the process. In earlier work of the  
authors (Ref 1) it was established that in the case of  
carburization inside a solid carburizer at an increased  
temperature, the degree of carbon saturation of the  
periphery of the carburized layer decreases. The  
intensive growth of the austenite grain for fine grain  
steels (20, 20Kh, 20KhGR and 20KhMM) begins in the  
case of heating above 1000°C. Daily inspection of

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